(Large Entity)

Docket No. EN999079

Jc**688**

TO THE ASSISTANT COMMISSIONER FOR PATENTS

smitted herewith for filing under 35 U.S.C. 111 and 37 C.F.R. 1.53 is the patent application of:

ELOOR ET AL

BUSINESS METHOD FOR QUALITY ASSURANCE OF SERVICES

May 1 2 1999 8

_										
=	n	\sim	\sim	0	\sim	d	~	۳	$\overline{}$	٠
	1 6									

☑ Certificate of Mailing with Express Mail Mailing Label No. EL172581492US

☑ ONE sheets of drawings.

☐ A certified copy of a application.

☑ Declaration ☑ Signed. ☐ Unsigned.

Power of Attorney

☑ Information Disclosure Statement

☐ Preliminary Amendment

☑ Other: ASSIGNMENT

CLAIMS AS FILED

<u> </u>						
For	#Filed	#Allowed	#Extra		Rate	Fee
Total Claims	9	- 20 =	0	x	\$18.00	\$0.00
Indep. Claims	3	- 3 =	0	x	\$78.00	\$0.00
Multiple Dependent (Claims (check	if applicable)				\$0.00
1.00	_				BASIC FEE	\$760.00
					TOTAL FILING FEE	\$760.00

_	Αc	check	in :	the	amo	unt	of

to cover the filing fee is enclosed.

The Commissioner is hereby authorized to charge and credit Deposit Account No. 09-0457

as described below. A duplicate copy of this sheet is enclosed.

☑ Charge the amount of

\$760.00

as filing fee.

- ☑ Credit any overpayment.
- ☑ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Dated:

11/12/99

John R. Pivnichny Reg. No: 43,001

IBM Corporation Dept. N50/Bldg. 40-4 1701 North Street

Endicott, NY 13760

cc: RECORDS

P01LARGE/REV06

APPLICATION FOR UNITED STATES LETTERS PATENT

APPLICANT(S) NAME: R. GLOOR ET AL

TITLE: BUSINESS METHOD FOR QUALITY ASSURANCE OF SERVICES

DOCKET NO. EN999079

INTERNATIONAL BUSINESS MACHINES CORPORATION

H	Certificate of Mailing Under 37 CFR 1.10
	I hereby certify that, on the date shown below, this correspondence is being deposited with the United States Postal Service in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C., 20231 as "Express Mail Post Office to Addressee".
	"Express Mail" Label Number EL172581492US
	On 11/12/99
	June Mitchell
	Typed or Printed Name of Person Mailing Correspondence
	Signature of Person Mailing Correspondence Date
l	

10

TECHNICAL FIELD

5 The invention relates to business methods for assuring quality services and particularly to delivering information technology services which have a high quality assurance.

BACKGROUND OF THE INVENTION

Providing information technology services has become an important part of business activity. Businesses recognize that having high quality information technology services are essential to operating their businesses in a competitive fashion. Various service providing companies compete with each other in formulating bidding for and delivering these services to their own and other companies. It is therefore also essential that these formulating, bidding for, and delivering aspects of the information technology service be carried out with high quality if a service providing company is to be successful in this competitive area.

While quality techniques have been applied in the operation of various businesses, including primarily hardware manufacture, little attention has been directed to quality processes in the service business area. Keane, in U.S. Patent 5,737,581 describes a product flow monitoring system including quality assurance measures. Turnbull, in U.S. Patent 5,208,765 describes a method and structure of a product development monitoring system in which

5 the process is divided into stages including quality assurance.

Stapleton, in U.S. Patent 5,537,483 describes a quality assurance feature of an image processing system. Ertel in U.S. Patent 5,307,262 describes a data quality review method and system in the health care environment. Tucker et al. in U.S. Patent 5,432,218 describe determining quality levels for fabrication and assembly designs of a manufactured product. Motai et al. in U.S. Patent 5,644,493 describe forming a quality control instruction table on the basis of a manufacturing drawing of the product. Miyakawa et al. in U.S. Patent 5,717,598 describe a manufacturability evaluation method to be employed while designing an article.

Unfortunately, none of the above quality systems apply to assuring the quality of solutions in the service industry or more particularly in the information technology service industry.

Information technology services include but are not limited to, selecting and providing workstation hardware, software operating systems and applications, server hardware and software, network and communication hardware and software, installation and maintenance of the above hardware and software, help desk operation, user training and education, on site and remote support, providing personnel and management to perform the above tasks. The services may also include developing, installing and maintaining a custom application for a customer.

In accordance with the teachings of the present invention, there is defined a new method of assuring the quality of a services solution.

35

30

35

It is believed that such a method would constitute a significant advancement in the art.

OBJECTS AND SUMMARY OF THE INVENTION

10

It is therefore a principal object of the present invention to enhance the service solution providing art by providing a quality assurance method for formulating, proposing, and delivering such services in a high quality manner.

It is another object to provide such a method wherein the profit objectives of the providing business are met.

It is yet another object to provide such a method wherein the customer need is satisfied.

These and other objects are attained in accordance with one embodiment of the invention wherein there is provided a method for a services solution, comprising the steps of, defining a first solution by a provider having a business objective, for a customer having a need, performing a first assurance review of the first solution to determine whether the first solution is technically viable, deliverable, and includes technical risk identification, assessment, and containment plans, performing a second assurance review of the first solution to determine whether the first solution includes complete schedules, a complete cost and profit case, and the first solution satisfies both the provider business objectives and the customer need, defining a second solution by the provider, by correcting any deficiencies identified in the first or second assurance reviews, thereafter, performing a first readiness review of the second

EN999079

10

solution to identify new issues or risks which arose during the obtaining customer commitment step, determine whether delivery plans are established, and establish baselines for performance and the profit case, periodically performing a project management review to verify the second solution is being managed as defined, meeting the profit case, and meeting the customer need, and thereafter, performing a deliverable readiness review to verify that the second solution has been delivered to the customer and that the second solution satisfies the customer need.

BRIEF DESCRIPTION OF THE DRAWING

The FIGURE shows a flowchart of a method of assuring quality in accordance with the present invention.

BEST MODE FOR CARRYING OUT THE INVENTION

For a better understanding of the present invention, together with other and further objects, advantages and capabilities thereof, reference is made to the following disclosure and the appended claims in connection with the above-described drawing.

30

In the FIGURE there is shown a flowchart describing the steps of a preferred embodiment of the present invention. Although the steps are shown in serial fashion for ease of explanation, there is no sequential limitation implied other than indicated in the appended claims. In addition some steps may be optional.

In step 12 a first solution for a customer need is defined by a provider business having a business objective. The customer need is preferably a need for information technology services by a company as explained above. The first solution defines the services, hardware, and software which will be provided to satisfy the customer need. The business objective includes a profit target but may also include overall revenue, hardware and software sales, personnel utilization, market share, and new business.

In step 14 a first assurance review of the first solution is performed. This review and all subsequent reviews is defined for the purpose of this specification to mean conducting a meeting to inspect, view, examine, or the like, written materials. The meeting may be held in person at a scheduled time and place but may also be held by teleconference, videoconference, or via a computer network or internet connection of the participants. Written materials may include text, graphs, figures, pictures, or video whether in hardcopy printed form or stored in computer readable form or in a format suitable for presentation. This first assurance review determines whether the first solution is technically viable. Technical experts may be called upon to evaluate the first solution in light of the needs of the customer

30

and take positions on the technical feasibility and soundness of the solution. This review also determines deliverability which is taken to mean the ability to deliver the first solution on the planned schedule using the financial and personnel resources identified in the first solution. This review also includes a technical risk identification with appropriate assessment and containment plans. Technical experts may also be used in this part of step 14.

In step 16 a second assurance review of the first solution is performed. This second assurance review has a business emphasis in contrast to the first review just described which has a technical emphasis. During this second assurance review, it is determined whether the first solution includes complete and acceptable schedules and definition of work scope, and a complete and acceptable cost and profit case including contingencies and business risk. Whether the first solution satisfies both the provider business objectives and the customer need is also determined in the second assurance review of step 16.

In step 18 a second solution is defined by the provider. Any deficiencies in the first solution identified in steps 14 and 16 are corrected in this second solution. Correction may involve revisions to the scope or schedules for services as specified in the first solution of step 12.

In step 20, which is optional, a third assurance review is performed. The purpose of this review is to determine whether the second solution defined in step 18 properly corrects the

deficiencies identified in steps 14 and 16. Depending on the number or seriousness of these deficiencies this review can be as extensive as the first and second reviews or it can be brief or completely eliminated if for example only minor deficiencies were identified.

10

5

In step 22 a commitment is obtained from the customer to the second solution. This commitment may take the form of a signed contract to purchase the services defined in the second solution. It may also be a statement of intent, letter of authorization, or other type of business commitment satisfactory to the provider.

In step 24 a first readiness review of the second solution is performed to identify new issues or risks which were not part of the second solution but which arose thereafter, for example during step 22 of obtaining customer commitment. It is also determined whether delivery plans are established. Delivery plans include plans for project management, schedules, and available resources. Delivery plans may also include plans for communication, organization, tracking, change control, and reporting. Baselines for performance and profit are also established in step 24. A baseline is a measure of the expected level based on the second solution plans.

30

īij.

In step 26 a project management review is performed periodically to verify that the second solution is being managed as defined, that it is meeting the profit case and that it continues to meet the customer need. The frequency of performing this review may vary widely depending on the results of step 24 and any previously performed project management reviews.

EN999079

In step 28 a deliverable readiness review of the second solution is performed to verify that the second solution has been delivered to the customer and that the second solution satisfies the customer need. This step is normally performed by experts in the subject matter of the second solution and may include inspection of project files and interviews with key supplier and customer personnel.

While there have been shown and described what are at present considered the preferred embodiments of the invention, it will be obvious to those skilled in the art that various changes and modifications may be made therein without departing from the scope of the invention as defined by the appended claims.

What is claimed is:

- 1. A quality assurance method for a services solution, comprising 1
- 2 the steps of:
- defining a first solution by a provider having a business 3
- objective, for a customer having a need; 4
- performing a first assurance review of said first solution to 5
- determine whether said first solution is technically viable, 6
- deliverable, and includes technical risk identification, 7
- 8 ... 9 ... 9 assessment, and containment plans;
 - performing a second assurance review of said first solution to determine whether said first solution includes complete schedules, a complete cost and profit case, and said first solution satisfies both said provider business objectives and
- said customer need;
- 13 defining a second solution by said provider, by correcting any
- deficiencies identified in said first or second assurance 15
- 16 reviews;

11

- thereafter, performing a first readiness review of said second 17
- solution to identify new issues or risks which arose during said 18
- obtaining customer commitment step, determine whether delivery 19
- plans are established, and establish baselines for performance 20
- 21 and said profit case;

- 22 periodically performing a project management review to verify
- 23 said second solution is being managed as defined, meeting said
- 24 profit case, and meeting said customer need; and
- 25 thereafter, performing a deliverable readiness review to verify
- 26 that said second solution has been delivered to said customer and
- 27 that said second solution satisfies said customer need.
- 1 2. The method as set forth in claim 1, further comprising the
- 2 step of performing a third assurance review of said second
 - solution to determine whether said deficiencies have been
- 4 satisfactorily corrected.

£...}

- 3. The method as set forth in claim 1, further comprising the step of obtaining customer commitment to said second solution.
- 4. The method as set forth in claim 1, wherein said first readiness review is performed to determine whether communication, organization, tracking, change control, quality management, and reporting delivery plans are established.
- 5. A method of managing a quality assurance service solution, comprising the steps of:
- 3 a first solution defining by a provider having a business
- 4 objective, for a customer having a need;
- 5 performing a first assurance review of said first solution to
- 6 determine whether said first solution is technically viable,
- 7 deliverable, and includes technical risk identification,
- 8 assessment, and containment plans;

- performing a second assurance review of said first solution to 9
- determine whether said first solution includes complete and 10
- reasonable schedules, a complete cost and profit case with 11
- contingencies identified, and said first solution satisfies both 12
- said provider business objectives and said customer need; 13
- defining a second solution by said provider, by correcting any 14
- deficiencies identified in said first or second assurance 15
- 16 reviews;
- thereafter performing a third assurance review of said second 17
- solution to determine whether said deficiencies have been 18
- satisfactorily corrected;
 - obtaining customer commitment to said second solution;
- 19 20 21 21 22 23 24 25 5 thereafter, performing a first readiness review of said second solution to identify new issues or risks which arose during said obtaining customer commitment step, determine whether delivery plans are established, and establish baselines for performance and said profit;
- periodically performing a project management review to verify 26
- said second solution is being managed as defined, meeting said 27
- profit case, and meeting said customer need; and 28
- thereafter, performing a deliverable readiness review to verify 29
- that said second solution has been delivered to said customer and 30
- that said second solution satisfies said customer need. 31

- 1 6. The method as set forth in claim 5, wherein said first
- 2 readiness review is performed to determine whether communication,
- 3 organization, tracking, change control, quality management, and
- 4 reporting delivery plans are established.
- 7. A method of bringing about a service solution for a customer
- 2 having a need by a provider having a business objective, said
- 3 method comprising the steps of:
- 4 performing a first assurance review of said first solution to
- 5 determine whether said first solution is technically viable,
- 6 deliverable, and includes technical risk identification,
- assessment, and containment plans;
 - performing a second assurance review of said first solution to determine whether said first solution includes complete and reasonable schedules, a complete cost and profit case with contingencies identified, and said first solution satisfies both said provider business objectives and said customer need;
 - defining a second solution by said provider, by correcting any deficiencies identified in said first or second assurance reviews:
- thereafter, performing a first readiness review of said second
- 17 solution to identify new issues or risks which arose during said
- obtaining customer commitment step, determine whether
- 19 communication, organization, tracking, change control, quality
- 20 management and reporting plans are established, and establish
- 21 baselines for performance and said profit;

8, 9, 9

11

12

ļui.

13

14

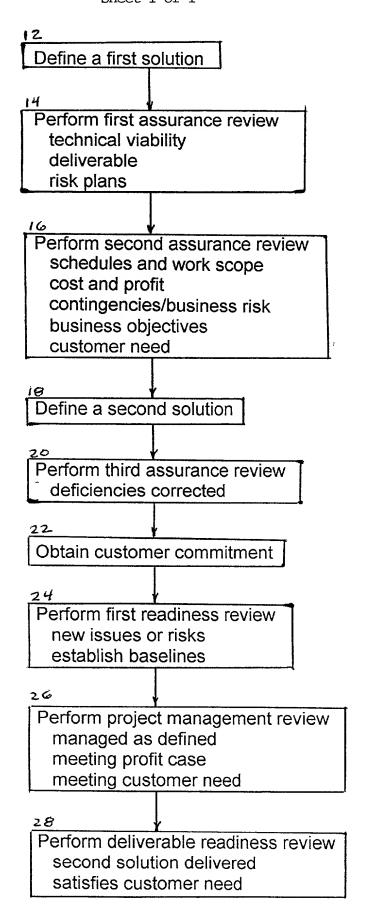
- 22 periodically performing a project management review to verify
- 23 said second solution is being managed as defined, meeting said
- 24 profit case, and meeting said customer need; and
- 25 thereafter, performing a deliverable readiness review to verify
- 26 that said second solution has been delivered to said customer and
- 27 that said second solution satisfies said customer need.
- 8. The method as set forth in claim 7, further comprising the
- 2 step of performing a third assurance review of said second
- 3 solution to determine whether said deficiencies have been
- 4 satisfactorily corrected.
 - 9. The method as set forth in claim 7, further comprising the step of obtaining customer commitment to said second solution.

10

ABSTRACT

BUSINESS METHOD FOR QUALITY ASSURANCE OF SERVICES

The quality of information technology services provided by an organization to a customer is assured. Assurance reviews of a first solution are performed and a second solution is defined to correct deficiencies. A third assurance review is performed. Customer commitment to the second solution is obtained. A readiness review, a project management review, and a deliverable readiness review are performed assuring customer need satisfaction.



Docket No. EN999079

Declaration and Power of Attorney For Patent Application

English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

	firs		ural names are liste	or (if only one name is listed belo ed below) of the subject matter w ed	
	BU	ISINESS METHOD FOR Q	UALITY ASSURANC	E OF SERVICES	
	the	e specification of which			
	(ch	neck one)			
theat Me than theat them is n that theat	\boxtimes	is attached hereto.			
151		was filed on		as United States Application No.	or PCT International
P. Marie		Application Number			
		and was amended on _			
i fi				(if applicable)	
ak ak	l h	ereby state that I have refuling the claims, as ame	eviewed and unders ended by any amer	stand the contents of the above indment referred to above.	dentified specification,
See See See See See	kno	cknowledge the duty to common to me to be mater ction 1.56.	disclose to the Unitial to patentability	ed States Patent and Trademark as defined in Title 37, Code of	Office all information Federal Regulations,
	Sec any liste inv	ction 365(b) of any fore y PCT International appli ed below and have also	ign application(s) for cation which design identified below, by International appli	r Title 35, United States Code, or patent or inventor's certificate nated at least one country other the checking the box, any foreign appearion having a filing date before	, or Section 365(a) of han the United States, oplication for patent or
	Pri	or Foreign Application(s)			Priority Not Claimed
	NON	NE			
	(Nu	ımber)	(Country)	(Day/Month/Year Filed)	_
	/Niu	ımber)	(Country)	(Day/Marth May Filed)	
			(Couriny)	(Day/Month/Year Filed)	
	(Nu	mber)	(Country)	(Day/Month/Year Filed)	_

н	*	٠	٠	ŝ
ı	Harry Min Spine Il 18th Mark	;	:	53.5
ı		:	:	*
ı	ì.	;		3
ı	*	:	:	٥
ł		:	:	ŕ
1	=	:		z
ł	Ĭ.	:		Ĺ
1	ě	;		:
ı	÷	٠	:	:
1		,		
ì	à.	:		1
Į	3	;	:	۶
1	5			1
ı	Ξ.	:		i
ı	"		•	•
ı	a file			:
ı	1	•	•	•
ı	1,1	:		:
ı	E			3
ı	=	٠	:	٤
ı				
ı	=			
				:
		:		
		:		
		:		
	adla adla	:	:	
	adla adla	:	:	
	alle seller aller	: :	:	11 32
	alle seller aller	: :	:	11 32
	alle seller aller	: :	:	11 32
	alle seller aller	: :	:	11 32
	alle seller aller	: :	:	11 32
	alle seller aller	: :	:	11 32
	alle seller aller	: :	:	11 32
	alle seller aller	: :	:	11 32
	alle seller aller	: :	:	11 32
	adla adla	: :	:	11 32

I hereby claim the benefit under application(s) listed below:	35 U.S.C. Section 119(e)) of any United States provisional
NONE		
(Application Serial No.)	(Filing Date)	
(Application Serial No.)	(Filing Date)	
(Application Serial No.)	(Filing Date)	
Section 365(c) of any PCT Internation insofar as the subject matter of each United States or PCT International U.S.C. Section 112, I acknowledge Office all information known to me	onal application designating th of the claims of this app application in the manner p the duty to disclose to the to be material to patentable be between the filing date of	any United States application(s), or the United States, listed below and, olication is not disclosed in the prior provided by the first paragraph of 35 United States Patent and Trademark ility as defined in Title 37, C. F. R., the prior application and the national

NONE		
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of second inventor, if any
Kathleen Moore Kurlanski

Second inventor's signature

Later Cathleen Moore Kurlanske

Post Office Address
Same as residence

Marie H 120

4.3

<u>Ļ</u>uk

ļ.,i

i.i.

Third inventor's signature	Date
Residence Myla Steelma Miller	<u>Movember 9, 1999</u>
2952 Franklin Oaks Drive, Herndon, VA 20171	
Citizenship USA	
Post Office Address	
Same as residence	
Full name of fourth inventor, if any	g myteste st. and declarate
Fourth inventor's signature	Date
Residence	
Citizenship	
Post Office Address	
Full name of fifth inventor, if any	
Fifth inventor's signature	Date
Residence	
Ditizenship	
Post Office Address	
Full name of sixth inventor, if any	
Sixth inventor's signature	Date
Residence	
Ditizenship	
Post Office Address	